

SUPPLEMENTAL MATERIAL

Supplemental Table 1. Construction of Life's Simple 7 score.

Metric	Ideal	Non-ideal
Smoking	Never or quit ≥ 12 months ago	Current or quit <12 months ago
BMI	$< 25 \text{ kg/m}^2$	$\geq 25 \text{ kg/m}^2$
Nutrition *	4-5 healthy components	0-3 healthy components.
Physical activity	≥ 150 min/week moderate intensity, or ≥ 75 min/week vigorous intensity, or ≥ 150 min/week of combined moderate and vigorous intensity	<150 min/week moderate intensity or <75 min/week vigorous intensity or < 150 min/week of combined moderate and vigorous intensity
BP	Untreated and $<120/<80$ mmHg	Treated to $<120/<80$ mmHg or untreated $\geq 120/ \geq 80$ mmHg
Fasting plasma glucose	Untreated and fasting plasma glucose <100 mg/dL or HbA1c $< 5.7\%$	Fasting plasma glucose ≥ 100 mg/dL, HbA1c $\geq 5.7\%$ or treated
Cholesterol	Untreated and < 200 mg/dL	< 200 mg/dL if treated or ≥ 200 mg/dL

*Based on 5 health dietary metrics (≥ 4.5 cups of fruits and vegetables a day, \geq two 3.5 ounces of fish servings per week, ≥ 3 ounce servings of fiber rich whole grains a day, < 1500 mg sodium per day, and <36 fluid ounces per week of sugar-sweetened beverages). BMI = Body mass index; BP = blood pressure.

Supplemental Table 2. Baseline characteristics for JHS participants who underwent CMR imaging at Visit 3 versus those who did not undergo CMR imaging at Visit 3.

	No CMR Imaging at Visit 3 n = 2993 [*]	CMR imaging at Visit 3 n=1202 [†]	p value
Demographics			
Age, y	56.8 (45.4-65.7)	50.6 (43.4-59.1)	<0.0001
Female	1960 (65.5)	756 (62.9)	0.11
BMI, kg/m ²	30.6 (26.9 - 35.8)	30.1 (26.5-34.7)	0.009
Simple 7 score component			
Non-Smoking	2568 (85.8)	1060 (88.2)	0.04
Ideal BMI	444 (14.8)	167 (13.9)	0.43
Ideal Nutrition	22 (0.7)	8 (0.7)	0.81
Ideal Physical Activity	556 (18.6)	276 (23.0)	0.001
Ideal BP	569 (19.0)	322 (26.8)	<0.0001
Ideal Fasting Plasma Glucose	2268 (75.8)	1015 (84.4)	<0.0001
Ideal Cholesterol	1320 (44.1)	604 (50.3)	0.0003

P values compare CMR imaging to no imaging. Values are median (25th-75th percentile) or n (%). Nonparametric tests (continuous variables) or chi-square testing (categorical variables) were used to determine P values. BMI = Body mass index; BP = Blood Pressure; CMR = Cardiac magnetic resonance. ^{*}Of note, some of these individuals may have had CMR at Visit 2. [†]Of 1202 participants who underwent CMR, 1188 had complete data on strain, and were included in our CMR analyses.

Supplemental Table 3. Analysis of the association of Life's Simple 7 with formally adjudicated incident HF.

	Model 1 HR	95% CI	p value	Model 2 HR	95% CI	p value
Simple 7 score 0-2	referent	referent	referent	referent	referent	referent
Simple 7 score 3	0.52	(0.35, 0.75)	0.0006	0.47	(0.30, 0.73)	0.0009
Simple 7 score 4-6	0.42	(0.24, 0.76)	0.004	0.45	(0.24, 0.85)	0.01
Number of participants	3661			3568		
Number of events	163			125		

Model 1 is adjusted for age and sex. Model 2 excludes adjudicated incident MI and fatal CHD at any time in JHS and is adjusted for age and sex. Incident HF was defined as formally adjudicated HF (after 1/1/2005). Abbreviations: CI = confidence interval; HR = hazard ratio; HF = heart failure